

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

)	
In the Matter of)	
)	
Amendment of Part 2 of the Commission's)	
Rules to Allocate Spectrum Below 3 GHz)	
For Mobile and Fixed Services to Support the)	ET Docket No. 00-258
Introduction of New Advanced Wireless)	
Services, including Third Generation)	
Wireless Systems)	
)	
Petition for Rulemaking of the Cellular)	
Telecommunications Industry Association)	
Concerning Implementation of WRC-2000:)	RM-9920
Review of Spectrum and Regulatory)	
Requirements for IMT-2000)	
)	
Amendment of the U.S. Table of)	
Frequency Allocations to Designate the)	RM-9911
2500-2520/2670-2690 MHz Frequency)	
Bands for the Mobile Satellite Service)	
)	

**SPRINT CORPORATION OPPOSITION
TO PETITION FOR RECONSIDERATION**

Sprint Corporation hereby respectfully submits its Opposition to the Petition for Reconsideration filed by the Satellite Industry Association ("SIA") in the above-captioned proceeding.¹ In its Petition, the SIA urges the Commission to reconsider its decision not to allocate the 2500-2520 MHz and 2670-2690 MHz bands for Mobile Satellite Service ("MSS") use for third generation wireless services ("3G") on the grounds that the Commission's bases for refusing to make the allocation --that fixed and MSS services cannot co-exist and that there is

¹ See "Amendment of the U.S. Table of Frequency Allocations to Designate the 2500-2520/2670-2690 MHz Frequency Bands for the Mobile Satellite Service," *Petition for Rulemaking of the Satellite Industry Association* (Filed April 28, 2000); Public Notice, "Comment Invited on Third Generation Wireless/IMT-2000 Petitions," RM-9911 and RM-9920 (rel. July 28, 2000).

already sufficient spectrum available for MSS to support 3G--do not withstand scrutiny. Sprint disagrees. The Commission was entirely correct on both counts and rightfully concluded that SIA did not present sufficient reasons to justify institution of a rulemaking proceeding.² In its Petition for Reconsideration, SIA is merely restating arguments made in its original petition without additional sound policy or evidentiary reason for reconsideration.³ The SIA Petition should be denied.

INTRODUCTION

On April 28, 2000, the SIA filed a Petition for Rulemaking seeking to have the Commission allocate the 2500-2520 MHz and 2670-2690 MHz bands MSS use 3G services. In support of its petition, SIA alleged that additional spectrum for MSS is necessary to meet the “demand” for services; additional MSS allocations are needed to deliver 3G wireless services; the MSS allocation should be adopted quickly to ensure timely delivery of advanced MSS services; and the public interest would be served by adoption of an allocation for MSS at 2.5 GHz. In response, the Commission sought comment on SIA’s petition and received an avalanche of objections to SIA’s assertions from incumbent users of the spectrum.⁴ Commenting

² See 47 C.F.R. § 1.407.

³ See 47 C.F.R. § 1.429.

⁴ See, e.g., Sprint Corporation Comments on Petitions for Rulemaking, RM-9911 and RM-9920 (filed Aug. 28, 2000) (“Sprint Comments”); Opposition to Petition for Rulemaking of the Wireless Communications Association International, Inc., RM-9911 (filed Aug. 28, 2000); Opposition of WorldCom, Inc., RM-9911 (filed Aug. 28, 2000); Comments of NewCentrix Broadband Networks, Inc. RM-9911 (filed Aug. 28, 2000); Opposition by Wireless One of North Carolina, L.L.C, RM-9911 (filed Aug. 25, 2000); Opposition of Digital Broadcast Corporation, RM-9911 and RM-9920 (filed Aug. 25, 2000); Opposition of the National ITFS Association, RM-9911 (filed Aug. 28, 2000); Opposition of Hispanic Information and Telecommunications Network, Inc, RM-9911 (filed Aug. 28, 2000); Opposition of Mississippi Board of Trustees of State Institutions of Higher Learning, RM-9911 (filed Aug. 24, 2000); Opposition of the Mississippi Department of Education, RM-9911 (filed Aug. 24, 2000); Opposition of Mississippi EdNet Institute, Inc., RM-9911 (filed Aug. 24, 2000); Opposition of the Mississippi State Board for Community & Junior Colleges, RM-9911 (filed Aug. 24, 2000); Comments of South Piedmont Community College, RM-9911 (filed Aug. 22, 2000); Comments of Randolph Community College, RM-9911 (filed Aug. 22, 2000); Opposition of the University of Minnesota, RM-9911 (filed Aug. 28, 2000); Consolidated Opposition of the Instructional Telecommunications Foundation, Inc., RM-9911 and RM-9920 (filed Aug. 28, 2000); Joint Opposition of the Archdiocese of Los Angeles Education and Welfare Corporation, Caritas Telecommunications Corp., the Catholic Bishop of Chicago, Catholic Television Network, the Colorado State Board of Agriculture, Counterpoint Communications, Inc., the Macomb

parties refuted all of SIA's assertions and also pointed out that SIA had completely disregarded the fact that the 2.5 GHz band is already heavily encumbered by MMDS/ITFS operations; that introduction of MSS service into this band would likely cause crippling interference problems; and that SIA's averred need for additional spectrum was unsubstantiated.⁵ Specifically, the SIA petition was challenged on the grounds that:

1. It failed to establish that additional spectrum is necessary to meet the "demand" for services, and indeed, judging from the troubles of Iridium, Globalstar and ICO, there may be very little demand for MSS services;
2. It failed to provide any evidence that additional spectrum is necessary for implementation of MSS 3G services;
3. MSS allocations should not be adopted since the spectrum is already being used by incumbent MDS/ITFS licensees, educational institutions, and commercial fixed wireless operators who are putting it to good use and who can not co-exist with MSS services;
4. Contrary to SIA's argument, allocation of the band to MSS would not be in the public interest as it would result in the displacement of ITFS/MDS service which is

Intermediate School District, Dioceses of the San Francisco Bay Area, the National Conference on Citizenship, Oakland Schools, the Office of Radio and Television of the Archdiocese of Hartford, the Roman Catholic Archbishop of the Archdiocese of Detroit, the Roman Catholic Communications Corp., the Roman Catholic Diocese of Dallas, the Roman Catholic Diocese of Orange, Stanford University, and the University of Colorado, RM-9911 (filed Aug. 28, 2000); Comments of the San Bernardino Community College District, RM-9911 (filed Aug. 28, 2000); Comments of The Association for Telecommunications Professionals in Higher Education, RM-9911 (filed Aug. 28, 2000); Opposition of the Arizona Board of Regents for Arizona State University, Boston Catholic Television Center, Inc., Butler County Community College, California State University - Northridge, Charlotte-Mecklenburg Public Broadcasting Authority, Connecticut Public Broadcasting, Inc., Diocese of Youngstown, Ohio, Dutchess Community College, Educational Television Association of Metropolitan Cleveland, Friends University, Hampton Roads Educational Telecommunications Association, Inc., Hartness Community College District, Jefferson County Board of Education, Monterey County Superintendent of Schools, New Jersey Public Broadcasting Authority, Newman University, San Jose State University, Santa Clara County Board of Education, Santa Cruz County Superintendent of Schools, University of North Carolina, WHYY, Inc, Wichita Public Schools-USD#259 and Wichita State University, RM-9911 (filed Aug. 28, 2000); Comments of Pikes Peak Community College, RM-9911 (filed Aug. 28, 2000).

currently providing educational and fixed wireless services to the public and offering a critical alternative to DSL and cable services.⁶

SIA did not file a reply and presented no evidence or argument to support its petition.

On January 5, 2001, the Commission released an order in which it determined that, based on the extensive record established by Comments, reallocation of the 2.5 GHz band to the MSS is unwarranted, sharing between the systems would present substantial technical challenges and MSS already has access to a significant amount of spectrum below 3 GHz to meet its needs in the foreseeable future. Concomitant to the Order, the Commission released a Notice of Proposed Rulemaking on a Petition by the Cellular Telecommunications Industry Association (“CTIA”), reviewing the spectrum and regulatory requirements for IMT-2000 (“NPRM”).

SIA responded to the Commission’s Order with the subject Petition for Reconsideration, raising the same arguments made in its earlier petition and claiming that the record did not present sufficient evidence of the interference potential between fixed services and MSS and that existing spectrum allocations for MSS are inadequate to support 3G services.⁷ As discussed below, none of these arguments has merit.

DISCUSSION

In its Petition for Reconsideration, the SIA at long last acknowledges the incumbent use of the 2500-2520 and 2670-2690 MHz bands by Instructional Television Fixed Service (“ITFS”) and Multichannel Multipoint Distribution Service (“MMDS”). It argues, however, that MSS service can co-exist with ITFS/MMDS services because: a) a 1999 TIA report “established” that MSS will not cause interference with ITFS/MMDS services in these bands; and b) MSS services will be provided in rural areas while ITFS/MMDS services are provided in metropolitan areas

⁵ Of some 41 Comments filed, all but two objected to the proposed allocation and those were MSS providers (Globalstar, ICO Global).

and this distance between the two will reduce interference problems to a “manageable” level. These arguments are entirely false and misleading.

A. Spectrum Sharing Between Fixed Services and MSS Will Result in Interference

The TIA report that SIA points to as establishing non-interference between MSS and ITFS/MMDS services does not even address the bands in question.⁸ Rather, it focuses on the 2165-2200 MHz bands. Furthermore, subsequent studies have established that 3G services will cause interference with ITFS/MMDS services. In fact, even TIA determined that such interference exists, stating: “There was considerable discussion in the Association Group meetings regarding the use of the 2500-2690 MHz band to accommodate 3G services. The group addressed the potential for sharing the band among ITFS/MDS and 3G users, and concluded that co-channel sharing is not possible.”⁹ Furthermore, in its comments, TIA itself “recommends that the Commission take into account the report of the Industry Association group on identification of spectrum for 3G services,”¹⁰ which finds that harmful interference will exist between the services.¹¹ Thus, SIA’s argument that there has been no showing of interference between MSS 3G and incumbent services is wrong.

⁸ As a preliminary and fundamental matter, SIA’s argument that the 1999 TIA TSB86 report supports its assertion of non-interference should be rejected as untimely since the 1999 report was clearly available to SIA in time for it to incorporate the argument in its original petition/comment cycle.

⁹ See Joint Comments of the Cellular Telecommunications & Internet Association, Telecommunications Industry Association, and Personal Communications Industry Association at 11.

¹⁰ See *In the Matter of Amendment to Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems; Petition for Rulemaking of the Cellular Telecommunications Industry Association Concerning Implementation of WRC-2000: Review of Spectrum and Regulatory Requirements for IMT-2000, Amendment of the U.S. Table of Frequency Allocations to Designate the 2500-2530/2670-2690 MHz Frequency Bands for the Mobile-satellite Service*, ET Docket No. 00-258, Notice of Proposed Rulemaking and Order, FCC 00-455 (Jan. 5, 2001) (“NPRM and Order”), TIA Comments at 4, citing Report of the Industry Association Group on Identification of Spectrum for 3G Services (Feb. 22, 2001) (hereinafter “Industry Association Report”).

¹¹ See *In re Redesignation of the 17.7-19.7 MHz Frequency Band, Blanket Licensing of Satellite Earth Station in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Spectrum in the 17.3-18 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite Service Use*, FCC 00-212 at ¶ 17 (re. June 22, 2000) (“Interim Report”).

With respect to its second argument, that MSS will serve largely as a rural service, and the economics of MMDS/ITFS dictate that the service be deployed only in more densely populated urban areas, this too is wrong. First of all, there is no reason to assume that MSS will remain a rural service. In fact, only recently, Loral abandoned its plans to provide internet access to the consumer, as it wrote off its investment in Globalstar.¹² Even NTT DoCoMo has determined that there is not sufficient demand in the consumer market, so it is targeting its initial offering at business.¹³ Thus, MSS providers are already finding themselves financially unable to target consumer markets and are instead focusing on populated urban areas where businesses reside. Secondly, MMDS/ITFS service is by no means restricted to densely populated areas and, in fact, is very well suited to rural areas. As the Commission itself has noted, "in rural or otherwise underserved markets in the country, MDS/ITFS may be the sole provider of broadband service."¹⁴ NTIA has also stated that MDS "holds promise for rural areas."¹⁵

B. Sufficient Spectrum has Already Been Allocated to MSS

SIA argues that a LEO MSS provider's stock of spectrum is insufficient to offer services compatible with 3G terrestrial systems, which will be broadband-data oriented and require more

¹² See "Loral Goes Back to Its Roots as it Drops Consumer Plans," by Anne Young, Total Telecom, February 6, 2001, stating: "Loral Space & Communications has announced it no longer intends to provide Internet access direct to the consumer, despite investing considerable time and energy into a planned project. The move came as the company said it had written off its investment in troubled mobile satellite services operator Globalstar."

¹³ See "Is 3G another Wireless Net Disaster?" By David Haskin, Managing Editor, AllNet\Devices, January 22, 2001, "Pent-up demand: Now there's the rub. Even NTT DoCoMo doesn't think there's much pent-up demand among consumers for 3G multimedia services, so it will target its initial 3G offering at business—and price it accordingly."

¹⁴ *Interim Report* at 11; NTIA *Digital Divide Report*; *Rural America Report*. "MDS's larger radius makes the service well suited for not only urban and suburban residential customers, but also customers in rural, underserved, and unserved areas, where the larger cell-size substantially reduces the cost of providing service." *Advanced Telecommunications Report* ¶ 39. Fixed wireless carriers are targeting rural areas for several reasons: (1) most rural markets have a densely populated center of business and residential activity; (2) wireless signals, particularly MDS, far exceed DSL distance limitations; (3) rural areas are often underserved by broadband technologies and infrastructure and wireless provides an inexpensive and quick way to reach untapped networks. *Strategis Report* at 69.

¹⁵ *Id.* at 26.

bandwidth than the voice and data services currently provided by LEO MSS providers.¹⁶ It estimates that LEO MSS providers will need an additional 10-15 MHz of spectrum in each direction to offer 3G services that are competitive with those offered by terrestrial providers.¹⁷ This 30 MHz is to come from the 2.5 GHz band, it states, because the majority of the 170.5 MHz of spectrum assigned to MSS is used by Geostationary Orbit MSS providers who “have expanding spectrum needs and cannot be expected to share their spectrum with LEO MSS providers.”¹⁸ The obvious question is...why not? Why should the fact that MSS providers have not yet found a way to incorporate 3G capabilities into systems and spectrum they have at their disposal entitle them to impinge upon the spectrum of others? Furthermore, this appears to be an example where “[T]he whole issue was to get it built, not whether there was a business case. ...The proponents of the technology became so enamored with it that they totally lost site of competitive alternatives.”¹⁹

As noted in Sprint’s comments on SIA’s Petition for Rulemaking, the “growing demand for MSS-developed voice and data services” in the United States on which SIA’s request for additional spectrum is premised is belied by the Iridium and ICO bankruptcies and Globalstar’s default on its \$250 million loan.²⁰ More recently, Globalstar announced that it had 31,200 subscribers, far short of expectations, and that it would have to halt payments to debtholders and preferred stock holders in order to fund its operations. “Globalstar’s latest predicament brought into question whether the satellite phone service business was viable in the first place.”²¹ Even Craig McCaw, who rescued ICO from bankruptcy, has recently stated “the mobile satellite

¹⁶ See SIA Petition for Reconsideration at 8.

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ See “Satellite Phone Service Struggles Against Cellular” by Yukari Iwantani, Reuters, 12 February 2001, quoting Herschel Shostek, President of Herschel Shostek Associates.

²⁰ See Sprint Comments at 5.

²¹ *Id.*

industry has failed spectacularly in delivering on its promise to users.”²² Against this backdrop of failure and uncertainty, it is hard to argue that MSS should be allocated additional spectrum, much less at the expense of viable services such as MMDS/ITFS, which are already operating and serving the public.

In contrast to the dismal outlook for MSS services, the outlook for MMDS/ITFS services is exceptionally bright. As stated in comments on the Petition for Rulemaking, as well as on the NPRM, MMDS/ITFS services are being aggressively launched throughout the country and promise to provide a much-needed and highly competitive broadband alternative to DSL and cable offerings. They offer a critical link to broadband services for persons and businesses in rural and underserved areas who might not otherwise have any service options.

Subscription to Sprint’s Broadband DirectSM Internet access service is growing at 2000 customers a week. Sprint provides fixed wireless broadband service over owned and leased MMDS/ITFS in many markets in the United States.²³ Sprint has acquired interests in more than 90 markets covering about 30 million households. Sprint and other companies, including WorldCom, Inc. and Nucentrix Spectrum Resources, Inc. are using the 2.5 GHz bands to provide a variety of services to the public, including broadband wireless Internet access. In addition, the 2.5 GHz band is used throughout the country by schools and other educational entities to provide educational services to students and others, including distance learning and Internet access. No other spectrum is specifically set aside for formal educational instruction. Introduction of MSS into the 2.5 GHz band would interfere with these services and jeopardize Sprint’s ability to serve thousands of customers.

²² See “ICO-Teledesic Links with Rival Satellite Firm Ellipso,” Total Telecom, March 15, 2001 (<http://www.totaltele.com/view.asp?articleID=37983&Pub=TT&categoryid=625&kw=ico>, quoting Craig McCaw.)

²³ Those markets are Phoenix, Tucson, Detroit, Colorado Springs, Houston, San Jose, Oakland, Denver, Salt Lake City, Wichita, Melbourne, Fla., Oklahoma City and Fresno.

SIA's Petition asserts that an MSS allocation in the 2.5 GHz band would facilitate global roaming. To support its argument, SIA reaches back to a quote from the 1994 Big LEO Proceeding describing the potential of MSS, completely ignoring the fact that, since that time, the "potential" of MSS to provide new, integrated services has not been realized, while that of new services such as MMDS/ITFS has.²⁴ As stated in Sprint's Reply Comments on the NPRM, use of the 2.5 GHz bands for mobile services is virtually non-existent, let alone ubiquitous, and those bands are therefore not viable candidates for global harmonization. Sprint's views in this regard were shared by many others, including equipment manufacturers such as Motorola and Lucent who agree that use of 2.5 GHz for 3G would impede global harmonization because other countries are not planning to roll-out 3G services in that spectrum.²⁵ While some European and Asian nations have indicated an availability of the 2.5 GHz band for 3G in 10-15 years,²⁶ Western Hemisphere countries, including Canada, Mexico and much of Latin America, favor the 1.7 GHz band for 3G.²⁷ Furthermore, Mexico, Canada and Brazil also use the 2.5 GHz band for MDS, as do Malaysia, China and South Africa.²⁸ CITEL Administrations have advocated using 1.7 GHz for 3G and have also allocated the 2.5 GHz band to fixed wireless.²⁹ Thus, allocation of the 2.5 GHz band will not promote global roaming and, in fact, will not even promote regional roaming since our closest neighbors, Canada, Mexico, and Latin America favor the 1.7 GHz band.³⁰

²⁴ See SIA PFR at 4, quoting *Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to a Mobile-Satellite Service in the 1610-1626.5/2483.5-2500 MHz Frequency Bands* 9 FCC Rcd 5936, 5938 (1994).

²⁵ See Sprint Reply Comments at 17, citing Motorola Comments at 12 and Lucent Comments at 9, 11-12 ("1710-1750/1805-1845 MHz...would establish a globally harmonized frequency arrangement that would be used by both 2G and 3G systems").

²⁶ See Comments of Sprint Corporation at 33.

²⁷ *Id.* at 33, citing *Interim Report*.

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*, citing Radio Advisory Board of Canada Comments on NPRM at 14.

CONCLUSION

In its Petition for Reconsideration, SIA merely restates arguments made in its original petition that were rejected by the Commission as insufficient to justify institution of a rulemaking proceeding. No additional sound policy or evidentiary reason has been presented for reconsideration. The only arguably “new” issues, i.e., the professed “evidence” of non-interference purportedly established by the TSB 86 and the inadequacy of existing MSS spectrum allocations are both wrong and untimely. The Petition for Reconsideration should be denied.

Respectfully submitted,

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